

Application No. 10/669,285  
Amendment dated December 28, 2005  
Reply to Final Office Action of October 4, 2005

Docket No. 1232-5165

**Amendments to the Claims:**

Claims 1-4 and 7-12 are pending in this application. Claims 1 and 10 are independent.

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-8 (CANCELLED):

9 (CURRENTLY AMENDED): ~~A method according to claim 1, A position detecting method of detecting a position of a mark formed on an object, said method comprising steps of:~~

~~forming an image of the mark on a sensor;~~

~~performing a first process that processes an image signal obtained by the sensor with respect to each of a plurality of values of a parameter of the first process;~~

~~performing a second process that processes a signal obtained by the first process to obtain a feature value with respect to each of the plurality of values of the parameter;~~

~~determining a value of the parameter based on feature values obtained by the second process and a reference value defined with respect to the mark; and~~

~~detecting a position of the mark based on a signal obtained by the first process using the value of the parameter determined in said determining step.~~

wherein the first process comprises a process for removing a noise in the image signal.

10-12 (CANCELLED):